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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/686,731	10/10/2000	William L. Eason	0544MH-40021	7126

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EXAMINER

TRAN, LAMBERT L

ART UNIT	PAPER NUMBER
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2144

DATE MAILED: 04/21/2004

9

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/686,731

Applicant(s)

EASON ET AL.

Examiner

Lambert L. Tran

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 04 February 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 10 October 2000 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Amendment

1. Amendment A, received on 04 February 2004, has been entered as Paper No. 8.
2. Claims 1, 3-7 are amended, claims 8-20 are added. Claims 1-20 remain pending.
3. Claims 5-7 as amended have overcome the rejection under 35 U.S.C. 112, second paragraph, as being indefinite. The rejection thus is withdrawn.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 1, 3, 8, 10-15, 17-20, are rejected under 35 U.S.C. 103(a) as being unpatentable over Bowman-Amuah, U.S. Patent No 6,636,242, in view of what would have been obvious (within the scope of knowledge of an ordinary skill artisan) at the time the invention was made.

6. In regard to claims 1, 8, 15, Bowman-Amuah disclosed:

a process module having a plurality of states, each state comprising logic defining a portion of a business, process, and comprising an identifier of a corresponding view to be presented to a user [see Bowman-Amuah, col. 2, lines 21-25, col. 18, lines 45-65, col. 36, lines 21-28, col. 46, lines 13-19, col. 101, lines 49-51, col. 191, lines 58-65, col. 251, lines 66-67, and Figure 54];

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controllers (controller class) in communication with the process module and a user interface, wherein the controllers translate user input and invoke the process module in response thereto, and wherein the controllers further receive the view identifiers from the process module and generate views for the user compatible with the user interface [see Bowman-Amuah, col. 185, lines 33-40, col. 252, lines 4-8].

receiving input from a user interface [see Bowman-Amuah, Figures 39-40]

7. Bowman-Amuah disclosed a process and system having states and state management passed/shared information among windows and/or web pages [see Bowman-Amuah, col. 101, lines 49-51], a business controller class that specified and interacted with business components and widgets (web page components) [see Bowman-Amuah, col. 185, lines 33-40], and a view configurer to manage the relationship between activities (business components, concrete objects) and the views (web pages, windows) [see Bowman-Amuah, col. 252, lines 49-53]. Bowman-Amuah disclosed the invention substantially as claimed. However, Bowman-Amuah did not expressly disclose *the view identifier comprising a logical specification of the corresponding view to be presented and views are generated based on the logical specifications of the views in the view identifiers*. While not expressly disclosed the view identifier comprising logical specifications of the corresponding view, Bowman-Amuah disclosed and suggested the use of identifiers in the Abstraction Factory [see Bowman-Amuah, col. 191, lines 52-64]. Abstraction Factory is an abstraction layer used by the view configurer to generate or launch different views [see Bowman-Amuah, col. 252, lines 54-56, col. 253, lines 20-24]. This provides the motivation for an ordinary skill artisan at the time the invention was made to associate the identifiers in the Abstraction Factory and the view in the view configurer.

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8. Accordingly, it would have been obvious to one of ordinary skill in the software programming art at the time the invention was made to have implemented the identifiers suggested by Bowman-Amuah in the Abstraction Factory as *the view identifier comprising a logical specification of the corresponding view to be presented and views are generated based on the logical specifications of the views in the view identifiers*, since the association of a view and its logical specifications (such as user preferences, workflow setting) was also suggested by Bowman-Amuah in col. 253, lines 20-24.

9. For the rationale set forth above, Bowman-Amuah taught *receiving the view identifier from the process module* (claim 8), by ways of associating the identifier of an abstract interface (*view identifier*) received from a concrete object (*process module*) in the Abstraction Factory [see Bowman-Amuah, col. 191, lines 52-64, and Figure 54].

10. As per claim 3, Bowman-Amuah disclosed the software controller as an Object Oriented controller class. In the Object Oriented programming art, a plurality of objects can be readily created by instantiation of a class object. *a second controller* is just an additional instantiation of the controller class. Class instantiation is well known in the Object Oriented programming paradigm.

11. In regard to claim 10, Bowman-Amuah disclosed: *retrieving a map* and utilizing the map (consulting the map) [see Bowman-Amuah, Figure 54, item (5412)].

12. In regard to claims 11, 17, Bowman-Amuah disclosed:

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receiving second input, second user, second state and second view identifier [see Bowman-Amuah, Figure 52, wherein multiple processes and objects are disclosed, each would readily associates with a view through the Factory Abstraction via the view configurer].

13. In regard to claims 12, 18, Bowman-Amuah disclosed: *user profile associated with the user interface* [see Bowman-Amuah, security profile and user context, col. 269, lines 61-67].

14. In regard to claims 13-14, 19-20, Bowman-Amuah disclosed: *characteristic of use, experience level of user, user profile for invoking process modules* [see Bowman-Amuah, col. 252, lines 21-25].

15. Claims 2, 4-7, 9, 16, are rejected under 35 U.S.C. 103(a) as being unpatentable over Bowman-Amuah, , in view of what would have been obvious (within the scope of knowledge of an ordinary skill artisan) at the time the invention was made, further in view of Bass et al., U.S. Patent No 6,549,956, hereinafter referred to as Bass.

16. In regard to claim 2, Bowman-Amuah disclosed the invention substantially as claimed. However, Bowman-Amuah did not expressly disclose *a content engine connected to the interface for receiving user inputs and invoking the process module; a channel adapter connected to the content engine for receiving the view identifier form the content engine*. In the same field of end-to-end business process [see Bass, col. 4, line 32], Bass disclosed: *a content engine (PUB/SUB engine, repository) connected to the interface for receiving user inputs and invoking the process module* [see Bass, col. 5, lines 28-32, and figure 3]; *a channel adapter connected to the content engine for receiving the view identifier (unique event ID) form the content engine, and selecting a presentation to be generated for the user (publish)* [see Bass, col.

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2, lines 1-3, col. 7, lines 17-36, col. 7, lines 35-36]. An ordinary artisan in the art at the same time the invention was made, would have been motivated to look to a way to control conversational flow for preconditions, post-conditions, workflow, and any other additional business logic without having the model talking directly up to the view [see Bowman-Amuah, col. 252, line 31 and lines 40-41], by implement the abstract interface of the Abstraction Factory with the channel adapter taught by Bass. Since this separation would reduce the level of difficulty involving taking an information source and creating an appropriate internal representation for it. This separation would further reduce the level of polymorphism needed in implement the Factory Abstract thus increase application performance.

17. Accordingly, it would have been obvious to one of ordinary skill in the system design and programming art at the time the invention was made to have incorporated Bowman-Amuah teachings with the teachings of Bass, for the purpose of providing a system that is easy to implement yet sustaining performance, and still allow for information transfer [see Bass, col. 1, lines 57-58].

18. In regard to claim 4, the combination inventions Bowman-Amuah and Bass disclosed: *providing a process module having a plurality of states, each state containing logic defining a portion of a business process, and containing an identifier of a corresponding view to be presented to a user* [see Bowman-Amuah, col. 2, lines 21-25, col. 18, lines 45-65, col. 36, lines 21-28, col. 46, lines 13-19, col. 101, lines 49-51, col. 191, lines 58-65, col. 251, lines 66-67]; *receiving the user input (business event, message) over the channel* [see Bass, col. 9, lines 13-14 and lines 22-23]; *sending the user input to the process module* [see Bass, col. 9, lines 15-17];

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within the process module, changing a state thereof and generating an identifier of a view to be presented to the user [see Bowman-Amuah, col. 252, lines 4-8, see Bass, col. 2, lines 24-26, see Bass, col. 7, lines 17-36];

selecting a view to be presented to the user which is compatible with the channel [see Bowman-Amuah, col. 252, lines 4-8]; and

sending the view to the user over the channel [see Bowman-Amuah, col. 252, lines 4-8, see Bass, col. 7, lines 35-36].

19. In regard to claim 5, Bowman-Amuah disclosed:

when changing state within the process module (state management), accessing a business application software module [see Bowman-Amuah, col. 101, lines 48-65].

20. In regard to claim 6, Bowman-Amuah disclosed:

when changing state within the process module, accessing a database [see Bowman-Amuah, col. 101, lines 48-65].

21. In regard to claim 7, Bowman-Amuah disclosed:

when changing state within the process module, modifying data in a database [see Bowman-Amuah, col. 101, lines 48-65].

22. In regard to claims 9, 16, Bowman-Amuah and Bass disclosed:

determining a channel, selecting a channel adapter (specify what events or types would flow through the channel adapter)[see Bass, configuration interface, col. 3, lines 51-67, col. 4, lines 1-3].

providing the logical specifications to the channel adapter [This is how the abstract interface is implemented. The channel adapter framework interface would encapsulate the abstraction of

view ID from an activity or business process, the mapping of view ID and configuration data in the content engine and producing view or web page data to the user through the network].

23. Since all the claims limitations were taught by the combination inventions of Bowman-Amuah and Bass, and of what would have been obvious (within the scope of knowledge of an ordinary skill artisan) at the time the invention was made, claims 1-20 are rejected.

Response to Arguments

24. Applicant's arguments, see Amendment A, filed on 04 February 2004, with respect to claims 1-7, pertaining to Flores (5,734,837), have been fully considered and are persuasive. The rejection of claims 1-7, pertaining to Flores, has been withdrawn.

25. In regard to Bowman-Amuah and Bates, Applicant's arguments filed in Amendment A have been fully considered but they are not persuasive.

26. Applicant argues Bowman-Amuah did not teach process module with states nor there is any connection between states and a corresponding view. It is noted that Bowman-Amuah disclosed in Column 35 and 36 a window system wherein the Field Interaction Management (window/view management) coordinated activities and invoking application logic based on the state of fields and user actions [see Bowman-Amuah, col. 36, lines 21-28]. The Field Interaction Management, as a window application, further disclosed in the Application Services class containing state management service modules [see Bowman-Amuah, col. 100, lines 30-36]. The Application Services operated on concrete objects. The concrete objects were disclosed in the Abstraction Factory upon which view configurer launched its view [see Bowman-Amuah, col.

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191, lines 52-64, col. 252, lines 54-56]. Clearly, there were relationship between states and corresponding views encapsulated in the abstract interface of the Abstraction Factory.

27. Responses to Applicant on view identifier, logical specifications of views, generation and selection of views, are described clearly in Paragraph 7-9 set forth in this Office Action.

28. Responses to Applicant on dependent claims such as claim 3 (mentioned in Amendment A, Page 13) can be found on Paragraph 10, set forth in this Office Action. Other dependent claims have also been elaborated in greater detail.

29. In response to Applicant's arguments that the proposed modification of Bowman-Amuah's View Configurer would change it from a passive component into an active one, it is noted that Bowman-Amuah disclosed: "A view should not be able to launch a new, separate activity, because that involves business logic... Therefore, a View Configurer will be created to manage the relationship between (business) activities and views." [See Bowman-Amuah, col. 252, lines 43-53]. Clearly, Bowman-Amuah disclosed the View as being passive while the View Configurer has to manage the relationship between (business) activities and views, thus responsive and active.

30. In response to Applicant's arguments that Bowman-Amuah, having used the ICM/MVC approach, taught away from any modification. It is noted that Bowman-Amuah expressly defined the Abstraction layer via the Abstraction Factory. Abstraction is used in the Object Oriented programming paradigm to encourage modification, since Abstraction isolates components into well-defined boundaries, thus allowing modifications to be focused and confined.

Conclusion

31. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

32. A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

33. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Lambert L. Tran whose telephone number is (703) 305-4663. The examiner can normally be reached on M-F at 9AM - 5PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jack B Harvey can be reached on (703) 305-9705. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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34. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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